

Additional chart coverage may be found in CATP2, Catalog of Nautical Charts.

## SECTOR 9 — CHART INFORMATION

## SECTOR 9

### COASTS OF ALBANIA, MONTENEGRO, AND CROATIA—KEP I KEFALI TO RT BAT

**Plan.**—This sector describes the W coasts of Albania, Montenegro, and Croatia (formerly Yugoslavia). The descriptive sequence is generally N from Kep i Kefali to the Albania-Montenegro border and then NW to Rt Bat.

#### General Remarks

**9.1 Winds—Weather.**—Bora is the name of the cold and dry NE or N wind which blows with great strength and affects the Adriatic Sea in the cool season. It is less frequent and generally weaker in summer. This wind is felt strongly along both sides of the Adriatic and is especially violent where mountains fall steeply to the coast. Winds from the SE, S, and SW sometimes blow with great force and cause rough seas along the E side of the Adriatic Sea.

Along this coast the sirocco and the bora, which is forecast by the formation of masses of white clouds above or behind the mountains, are most prevalent during the autumn and winter months. The mistraele is the prevailing wind during the summer months and SW winds frequently attain considerable force and set up high seas. Land and sea breezes, alternating with great regularity, prevail during the summer months and frequently cause a rather heavy sea.

In general, the prevailing wind in the winter is from the NNW through N to NNE although SE and SW winds are frequent. During the summer the prevailing wind is from the WNW through N to NE, and SE and SW winds are rare.

In the winter along the NW coast of Pellg i Drint the NE bora is severe and most frequent and alternates with the sirocco, a SE wind, which is more frequent in the autumn than in the winter. The sirocco is often accompanied by thick weather, making approach to the ports difficult.

**Caution.**—Vessels are advised that while navigating the waters described within this sector, the chart soundings and the coastline are not dependable. Piers and berthing facilities within some of the harbors may be in disrepair or have collapsed, and consultation with the port authorities before entering is recommended.

It is reported that all foreign vessels must receive prior permission from the proper authorities before entering the territorial waters of Albania.

It was reported that areas along the coast of Albania were unsafe because of mines and extreme caution is necessary. Ports should only be approached via the recommended route tracks which may best be seen on the chart.

It is reported (1995) that measures have been taken to clear the coastline of mines. The area is now considered safe for surface navigation, but could still present a hazard for vessels anchoring, fishing, or engaged in any submarine or seabed activity. Vessels are still advised to use the recommended approach routes.

All vessels calling at Croatian ports must send an ETA 24 hours in advance through a Croatian radio station.

Pilotage is compulsory for vessels over 500 grt and all vessels carrying dangerous chemical or combustible substances while proceeding between Croatian ports and while in Croatian coastal waters.

Due to conditions of armed conflict, vessels are advised to use extreme caution when in the surrounding territorial waters of the former Yugoslavia. Reports have been received of vessels being fired upon, port blockades, and indiscriminate minelaying.

#### Kep i Kefali to Gjiri i Vlores

**9.2 Kep i Kefali** (Kepi i Qefalit) (39°55'N., 19°55'E.), marked by a light, is covered with bushes. This point is the NE entrance point of Corfu Channel and is conspicuous from the S.

From this point the coast trends N and NW for 42 miles to Kep i Gjuhezes. It is visible from a considerable distance offshore and presents a long line of sparsely forested gray cliffs which rise directly from the sea with little or no beach.

**Tides—Currents.**—The coastal current that enters the Adriatic Sea through Stenon Kerkiras sets in a NW direction along the coast as far as Kep i Gjuhezes, where it sets in a general N direction. The velocity of this current is irregular and is affected by prevailing winds. The average velocity is about 0.5 knot and increases perceptibly as it reaches Kep i Gjuhezes, especially during SE winds.

The NW coastal current sets NE through the passage between Kep i Gjuhezes and Sazan and then N between Sazan and the mainland, but it is not very strong, except with strong SE winds.

The offshore current sets in a general N and NNW direction at a velocity of 0.5 to 2 knots. This current is affected by the wind in the approximate manner of the coastal current.

**Porte e Palermos** (40°03'N., 19°47'E.), a small bay, is frequented primarily by coasters. It is entered between Kep i Palermos and Kep i Kavadonit, 0.8 mile NW. A small projection, which is surmounted by an old fort with a tower, extends from the NE shore of the bay directly opposite the entrance and divides it into two arms. Porte e Palermos provides good shelter, but the depths increase rapidly from the shore. The best anchorage is in depths of 18 to 55m, mud, about 0.2 mile off the head of Armarida Bay, the N arm.

Kep i Palermos, the S entrance point, is 103m high and is marked by a light.

Gryk'e Spiles, entered 2.5 miles NW of Porte e Palermos, is a small coastal indentation which is open to the SW. This indentation, although steep-to, affords moderate shelter. Small vessels, with local knowledge, can anchor in depths of 9 to 28m, sand and mud, about 250m off the N shore.

Rrug e Bardhe, located 11.5 miles NW of Porte e Palermos, is a remarkably and conspicuous white watercourse. Great torrents descend steeply down it from Maja e Cikes, 2,045m high, which stands inland 3 miles NE.

**Kep i Gjuhezes** (40°25'N., 19°18'E.), a comparatively small and low point, is located at the NW extremity of a mountainous peninsula which forms the W side of Gjiri i Vlores. The summit of this peninsula is 831m high and stands 4 miles SE of the point.

**Kep i Karlovecit** (40°26'N., 19°20'E.), the S entrance point of Gjiri i Vlores, is located 1.8 miles NE of Kep i Gjuhezes. This point is the N extremity of the peninsula and is marked by a light.

**9.3 Ishulli i Sazanit** (40°30'N., 19°17'E.), an island, lies 2.5 miles NNW of Kep i Karlovecit and attains a height of 331m. Two almost equally elevated peaks are separated by a depression and give this island, from a distance, the appearance of being two islands. The W side of the island is formed by vertical cliffs, up to 91m high in places, and is marked by several clefts and caves. The E side is less rugged, but is mostly inaccessible except at Porto San Nicolo in the NE part. A signal station surmounts the summit of the island. A main light is shown from a prominent structure, 12m high, standing in the NW part of the island.

**Porto San Nicolo** (40°30'N., 19°17'E.), a small harbor, lies at the head of a bay on the NE side of the island. It is protected by breakwaters and has an entrance, 90m wide, with a depth of 4.5m. There is 209m of quayage, with depths of 1.8 to 5m alongside, which is used by small craft and coasters.

**Caution.**—A prohibited area, which may best be seen on the chart, surrounds Ishulli i Sazanit and extends 1 mile seaward. Vessels should request permission from the local authorities before entering this area and attempting to enter Porto San Nicolo.

## Gjiri Vlores (40°24'N., 19°26'E.)

**9.4** Gjiri i Vlores (Valona Bay) is entered between Kep i Karlovecit and Kep i Trelimes, 5.2 miles NE. This large bay extends up to 9 miles SE and is about 5 miles wide. The W shore is formed by the high and almost precipitous peninsula which extends SE from Kep i Gjuhezes. The E shore for the most part consists of white sandy beaches backed by sand dunes. The SE part of the bay is backed by hills and the head is low, wooded, and marshy in places.

**Vlores** (40°28'N., 19°30'E.) (World Port Index No. 41690), a small town, is situated on the NE side of the bay and is fronted by a small harbor protected by two jetties.

**Depths—Limitations.**—The main commercial facilities include East Pier, 100m long, with depths of 6 to 7.5m alongside which can handle ro-ro vessels; and West Pier, 100m long, with depths of 5 to 8m alongside which is used for bitumen. Vessels up to 6,000 dwt and 7.4m draft can be accommodated.

An oil terminal (Krionero) is situated close N of Kep i Kalas and is the W terminus of several pipelines extending from the Kucove oil fields. A berth lies in a depth of 11m and consists of several mooring buoys and a small pier which front the terminal.

An offshore tanker loading station, consisting of a structure on piles and several mooring buoys, lies 4 miles NW of the harbor in a depth of 12m.

**Aspect.**—The prominent ruins of a castle surmount a peak, 379m high, standing 1.8 miles ESE of the harbor. A conspicuous oil refinery is situated close N of Kep i Kalas, a point located 2.2 miles S of the harbor.

**Pilotage.**—Pilotage is compulsory. Pilots can be contacted by VHF and board in the vicinity of the anchorage 0.7 mile SW of the harbor. Vessels should send an ETA 48 hours in advance.

**Regulations.**—Vessels must approach and enter Gjiri i Vlores by a recommended route track, which may best be seen on the chart, leading between Ishulli i Sazanit and Kep i Karlovecit. (See General Remarks.)

**Anchorage.**—Vessels may anchor in depths of 18 to 24m, mud and weed, about 0.7 mile offshore SW of Vlores. This roadstead is exposed to NW winds which may cause a heavy sea and the bora is felt severely here. Patches of rock have been reported to exist in this area and may cause anchors to drag.

**Caution.**—The waters in the approaches to Gjiri i Vlores are reported to be unsafe because of mines. Vessels should enter only during daylight hours and closely follow the recommended track.

A prohibited area, which may best be seen on the chart, extends along the SW coast of the bay and extends up to 1 mile seaward.

Anchoring is prohibited within Gjiri i Dukatit, the S part of Gjiri i Vlores.

## Gjiri i Vlores to Durres

**9.5 Kep i Treporteve** (40°30'N., 19°25'E.), the NE entrance point of Gjiri i Vlores, is the S extremity of a low line of hills which rise to heights of 60m close inland. A light is shown from a structure, 10m high, standing 1 mile NNW of the point.

The coast from Kep i Treporteve to Kep i Rodonit, the S entrance point of Pellg i Drinit, trends in a general N direction for 66 miles and presents a marked contrast to the rugged and mountainous land in the vicinity of Gjiri i Vlores.

Between Kep i Treporteve and Kep i Lagit, the S point of entrance of Gjiri i Durresit, 39 miles NNE, there are few landmarks of navigational interest. The shore is formed by a continuous sandy beach which is interrupted only by the mouths of the rivers discharging into the sea. Sand dunes lie behind the beach and inland, a deltaic plain, consisting of a wide expanse of lagoons and marshes, extends as far as the hills of the interior.

Between Gjiri i Durresit, the only place of commercial importance along this stretch of coast, and Kep i Rodonit, the coast becomes bold and presents a rugged aspect.

**Caution.**—The coastal hydrography between Gjiri i Vlores and Gjiri i Durresit is taken from old surveys and adjusted to more recent shoreline information. Because of this and the incomplete nature of the surveys, it is recommended that vessels remain well offshore when navigating in this area.

**Lumi i Vjoses** (40°40'N., 19°19'E.) flows into the sea 10 miles NNW of Kep i Treporteve (Kep i Trelimes). The mouth of this river is subject to great changes and is marked by a light. It is fronted by a shallow bank, formed from alluvial deposits, and should be given a wide berth.



DURRES FROM SSW

**Kep i Semanit** (40°48'N., 19°22'E.), located 18 miles N of Kep i Treporteve, is a low projection which floods during bad weather. It is surmounted by several buildings, but has been reported to be not easily seen.

A sandspit, about 1 mile long, projects from the N side of the point and Skele e Semanit, a natural basin, is formed between it and the coast. This basin used as an anchorage by local craft.

Monastir i Ardenices, a conspicuous monastery, stands on a hill 9 miles E of Kep i Semanit. Another monastery is situated near the village of Frakull'e Pashajt, 12 miles SE of the point, and is also a useful landmark.

Gryka e Semanit and Gryka e Shkumbinit, two rivers, flow into the sea 9 miles N and 13.5 miles NNE, respectively, of Kep i Semanit. A wreck, with a depth of 8.5m, is reported to lie about 2 miles W of the mouth of the former river.

**Kep i Lagit** (Kep i Tures) (41°09'N., 19°26'E.), the S entrance point of Gji i Durresit, is the NW extremity of a wooded range of hills that extend 8 miles SE from the cape. A light is shown from a prominent tower, 8m high, standing on this cape.

**9.6 Gji i Durresit** (41°15'N., 19°29'E.) lies between Kep i Lagit and Kep i Durresit, 9.8 miles N. This bay recedes 4 miles E and its shores are low and sandy except at Shkemb i Kavajes and the two entrance points. Shkemb i Kavajes is located at the E side of the bay, 4 miles SE of Kep i Durresit. It is formed by a conspicuous white cliff, 104m high.

Selada Banks, which occupy the S portion of the bay, extend up to 4 miles N of Kep i Lagit and can be dangerous to vessels approaching in thick weather.

Kep i Durresit is surmounted by a round hill, 112m high. It is the S extremity of a high coastal ridge that extends 4 miles N. This ridge, known as Mal i Durresit, rises to a flat summit 1.5 miles N of the cape and is conspicuous from seaward. A main light is shown from a prominent structure, 14m high, standing on the cape.

## Durres (41°19'N., 19°27'E.)

World Port Index No. 41670

**9.7** The port of Durres lies close E of Kep i Durresit and consists of a harbor protected by breakwaters. This port is the largest on the Albanian coast and serves as the principal center of commerce for Tirane, the capital of Albania.

**Depths—Limitations.**—Durres Bank and Talbot Shoal, with depths of less than 4m, extend up to about 2 miles S of Kep i Durresit. An approach channel, 2.1 miles long, leads NNE to the harbor entrance and was reported to have a controlling depth of 8.9m. Several wrecks lie about 2 miles

SSE of Kep i Durresit. They lie adjacent to the W side of the channel and are marked by a lighted buoy.

There are ten berths in the harbor with depths of 7 to 8.8m alongside. There are facilities for general cargo, bulk, and ferry vessels. In addition, a dolphin berth for tankers has a depth of 7m alongside. Vessels up to 25,000 dwt and 8.4m draft can be accommodated.

**Aspect.**—The harbor approach channel is marked by buoys. Range lights, aligned 018°, lead through a former mined area to the harbor.

The Royal Villa, a conspicuous white castle, is situated close NE of Kep i Durresit and overlooks the W side of the town. It is easily identified and is visible for a considerable distance in clear weather. Several prominent chimneys stand to the N of the harbor.

**Pilotage.**—Pilotage is compulsory. Pilots can be contacted by VHF channel 11 and board about 3 miles SSW of the harbor entrance. Inbound vessels are advised to anchor and await a pilot. It has been reported (1997) that pilotage is not always available.

Vessels arriving from ports in Slovenia, Croatia, Montenegro, Italy, and Greece must send an ETA 48 hours in advance. Vessels arriving from ports in other countries must send an ETA 5 days in advance and also 48 hours in advance.

All vessels must also send a further ETA 24 hours in advance. Messages may be sent through Durres Radio (ZAD) and should include the following information: Name and flag; last port of call; draft on arrival; cargo description and distribution; state of health; and tonnage and length. (See General Remarks).

**Regulations.**—Vessels must approach the bay by a recommended route track which may best be seen on the chart. This track leads NE towards the S part of the bay and then NNE towards the port. (See General Remarks).

**Anchorage.**—Anchorage can be taken by large vessels in a depth of 9m, mud, about 3.7 miles SSE of Kep i Durresit. This roadstead is exposed to the SW and strong winds from that direction, although rare, possibly require the use of both anchors.

**Caution.**—The waters in the approaches Durres are reported to be unsafe because of mines. Vessels should enter only during daylight hours and closely follow the recommended track. Caution is required as the latter route passes only 1 mile W of Selada Shoals.

Due to the existence of submarine cables, an anchorage prohibited area, which may best be seen on the chart, extends up to 7 miles W and SW of Kep i Durresit.

A spoil ground area, which may best be seen on the chart, lies in the approaches 3.5 miles SSW of Kep i Durresit.

Several wrecks, some dangerous, lie in the approaches and may best be seen on the chart.

The navigational aids in Durres and its approaches have been reported unreliable; they may be missing, out of position, or not as charted.

Navigation may be dangerous due to ships anchoring in the fairway and fishing nets being laid out between the turning basin and the harbor entrance.

## Durres to Bar

**9.8 Kep i Palit** (41°25'N., 19°23'E.), 73m high, is the NW extremity of a hilly and wooded projection which extends 2 miles from the coast. This point is marked by a light and is fronted by a rocky spit extending about 0.5 mile NW. Vessels are advised to give this point a berth of at least 1.5 miles.

Small craft, with local knowledge, can anchor, sheltered only from SW winds, in a depth of 7m, mud, about 1 mile ENE of the point.

Gji i Lalzes is the NE part of the bight formed between Kep i Palit and Kep i Rodonit, 11 miles NNE. It affords temporary anchorage in a depth of 11m, mud, about 1 mile offshore. However, caution is necessary as the depths in the vicinity of the coast and the bay are subject to frequent changes.

**Kep i Rodonit** (41°35'N., 19°27'E.) is a narrow and conspicuous ridge, 30m high, which forms the bold and steep termination of a wooded promontory. This point is marked by a light, fronted by a spit with uneven depths, and should be given a berth of at least 3 miles.

**Pellg i Drinit** (41°43'N., 19°29'E.) is an extensive gulf lying between Kep i Rodonit and Rt Mendre, 25 miles NW. The E and N shores of this gulf are low, being formed by the deltas of several rivers, but the NE shore is backed by mountains which almost parallel the coast. The shore in the vicinity of the river deltas should not be closely approached, as the depths are subject to frequent changes. Anchorage is available in depths of 11 to 22m, mud, in the SE portion of the gulf, about 1 mile offshore. This anchorage is sheltered from SW winds, but is open to the NW.

The current along this coast sets in a general NW direction at a velocity of from 0.5 to 2 knots. The current frequently sets onshore at a velocity of about 0.75 knot when influenced by SE winds, and sometimes even in a calm. During SE winds eddies are formed off the entrance of Boka Kotorska.

Kep i Shengjin, marked by a light, is located 14.8 miles NNE of Kep i Rodonit. This point is the SE extremity of a mountainous ridge which attains a height of 561m at Maja e Zeze, near its NW end. The point is prominent, being sharply in contrast with the lowlands to the SE, and several buildings are situated on it.

**Shengjin** (41°49'N., 19°36'E.) (World Port Index No. 41660), a small town, stands on the W side of a small bay lying at the E side of Kep i Shengjin. It is fronted by a small harbor which has depths up to 6.5m and is used by coasters. A pier, 60m long, has depths of 1.8 to 5.5m alongside. The harbor entrance is obstructed by shallow banks, which extend from

both sides of the bay, and is approached through a narrow channel. This channel is marked by buoys and is indicated by lighted range beacons. A conspicuous white cross on a stone pyramid is situated at the head of the harbor, 0.7 mile NE of Kep i Shengjin. Pilotage is compulsory. A local pilot is available and can be contacted by VHF. Vessels can anchor in depths of 20 to 22m, sand and mud, about 1.3 miles SSW of Kep i Shengjin.

**9.9 Rijeka Bojana** (Lumi i Bunes) (41°35'N., 19°27'E.) discharges into Pellg i Drinit 10 miles WNW of Shengjin. The mouth of this river is divided into two branches, the depths of which vary considerably and frequently. Depths of 4m exist in the river for about 15 miles above the mouths, which have depths of 1.5 to 30m, depending upon the season and the winds. The river is used by small craft and barges.

The approximate coastal boundary between Albania and Montenegro lies in the vicinity of the SE mouth of this river.

Hrid Deran, a red rock, 4m high, lies 1 mile offshore, 5 miles WNW of the SE mouth of Rijeka Bojana. Reefs surround this prominent rock and it should not be closely approached.

**Ulcinj** (41°55'N., 19°12'E.), a tourist resort, is situated 4 miles NW of Hrid Deran. This small town is walled and fortified. It stands in the form of an amphitheater and is conspicuous from seaward. The coast in the vicinity of the town is hilly and presents a strong contrast with the lowlands to the E. A small harbor fronts the town and has depths up to 4m. It is used by small craft, ferries, and coasters. Pilotage is compulsory. A local pilot is available and can be contacted by VHF.

Two submerged pipelines originating from Rt Deran and a point close E of Ulcinj, respectively, extend up to 1.3 miles seaward.

The coast to the SE of Ulcinj becomes low and swampy, particularly in the vicinity of Rt Deran and the Bojane River (Bune River) delta.

The international boundary between Montenegro, formerly Yugoslavia, and Albania is defined by the lowest portion of the Bojane River and the E branch of the mouth.

**Rt Mendre** (41°57'N., 19°09'E.), steep-to and covered with green brush, projects WNW from the coast 3 miles NW of Ulcinj. A main light is shown from a prominent structure, 8m high, standing on this cape. Uvala Valdanos, a small cove, lies close N of this cape is open to the NW. It provides anchorage for small vessels in depths of 10 to 15m, mud and weed, about 0.3 mile within the entrance.

Otocic Stari Ulcinj, 44m high, lies close off the coast, 2.5 miles N of the cape. This prominent islet is surmounted by a building and is connected to the shore by a rocky ridge.

**Rt Volujica** (42°05'N., 19°04'E.), the S entrance point of Barski Zaliv, is located 9 miles NNW of Rt Mendre and is the NW extremity of a mountainous and barren projection. Several conspicuous storage tanks are situated on this cape. A main light is shown from a tower, 6m high, standing on the cape.

Barski Zaliv, a bay, lies between Rt Volujica and Crni Rt, 4 miles NW, and is backed by bold and mountainous land.

**Bar (42°05'N., 19°05'E.)**

World Port Index No. 41640

**9.10** The port of Bar lies close NE of Rt Volujica in the SE corner of Barski Zaliv. It consists of a harbor protected by breakwaters.

**Depths—Limitations.**—The harbor entrance is 200m wide and has a depth of 14m. There is a total of 2,691m of principal commercial quayage with depths of 10 to 13m alongside and facilities for bulk, chemical, container, ro-ro, and tanker vessels. Vessels up to 160,500 dwt and 12.5m draft can be accommodated. Tankers up to 80,000 dwt can be handled. In addition, there is 760m of quayage, with a depth of 6m alongside, which is used by small passenger vessels and coasters.

**Aspect.**—Mount Petilje, 715m high, stands 2.3 miles N of the harbor and Fort Susanj is situated on its slope 0.5 mile SW of the summit. The old town of Stari Bar is situated on a hill 2.5 miles E of the harbor.

Mount Rumija, 1,593m high, stands 4 miles E of the harbor. It is prominent and the highest peak of many in this vicinity.

**Pilotage.**—Pilotage is compulsory for vessels over 500 grt and for all vessels carrying chemical or combustible substances. Pilots can be contacted by VHF and board about 1 mile NW of the harbor entrance. Vessels must send an ETA 24 hours in advance through Montenegro Radio. (See General Remarks).

**Anchorage.**—Vessels may anchor in a depth of 30m, mud, about 1.3 miles NW of Rt Volujica.

**Caution.**—Anchorage is prohibited to the E of a line joining Rt Volujica and Rt Rotac, 2 miles NNW.

Strong winds from the W and SW raise a heavy sea in the bay and may make the roadstead untenable.

**Bar to Boka Kotorska**

**9.11 Spicanski Zaliv** (42°08'N., 19°03'E.), a small bay, lies between Rt Rotac, located 2 miles NNW of Rt Volujica, and Crni Rt. Small vessels can anchor, with offshore winds, in a depth of 16m, sand, within this bay. However, with onshore winds it is completely exposed. This bay is a resort area and several hotels stand along the shore.

**Crni Rt** (42°08'N., 19°01'E.), the N entrance point of Barski Zaliv, is a bold and steep-to headland which rises to a height of 496m about 1 mile NNE of its extremity. A small cove lies 1.5

miles N of the headland and affords shelter to small craft from NW winds.

Rt Dubovica, a poorly defined but precipitous point, is located 3 miles NW of Crni Rt. A prominent hill, 314m high, stands 0.6 mile SE of the point. Hrid Mravinjak, an above-water rock, lies on foul ground which extends up to about 250m seaward from the point.

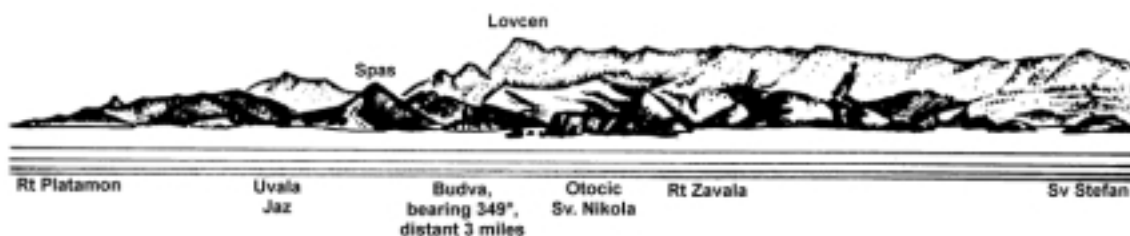
Rt Crvena Stijena, 323m high, is a steep-to and rugged point located 2.5 miles NW of Rt Dubovica. The coast between is indented by Uvala Buljarica, a small bay. Petrovac, a small village, is situated 0.5 mile E and within Rt Crvena Stijena. It is fronted by a stone quay, 50m long, with a depth of 4m alongside.

Hrid Sveta Nedelja, 33m high, is surmounted by a white chapel. This islet is located 0.7 mile SSE of the W extremity of Rt Crvena Stijena and lies on a shoal bank with depths of less than 9m. A small islet lies close S of Hrid Sveta Nedelja, and Plic Katic, a shallow and steep-to reef, lies on the S end of the above bank about 0.7 mile offshore. A submarine pipeline is reported to extend about 0.7 mile SW from the vicinity of the village of Petrovac.

Sveti Stefan, a small and rocky peninsula, is located 3.2 miles NNW of Rt Crvena Stijena. It is connected to the mainland by a low and narrow neck of land. A village, with a prominent chapel, is situated on this peninsula and a small quay, with a depth of 3m alongside, projects from the N shore. Small vessels with local knowledge can anchor in the small coves formed on either side of the peninsula. A submarine pipeline is reported to extend 0.7 mile SW from a point on the shore close S of Sveti Stefan.

**Otocic Sveti Nikola** (42°16'N., 18°51'E.), 121m high, lies with its S extremity 1.5 miles W of Sveti Stefan. The W shore of this island is precipitous and is fronted by rocks and foul ground. The E shore is sloped and cultivated. A light is shown from the S end of the island and a chapel stands on the N end.

**Uvala Mala Luka** (42°16'N., 18°52'E.) is entered between Sveti Stefan and Otocic Sveti Nikola. This bay is free of dangers and is protected from all winds. Rt Zavala, the S extremity of a small projection, is located at the head of the bay and the ruins of a fort stand above it. The bay provides anchorage in depths of 16 to 29m, good holding ground. Uvala Zavala, an inlet, lies WNW of Rt Zavala and provides good shelter for small vessels in depths of 12 to 17m. The W side of this inlet is bordered by a rocky spit which extends N from the NW extremity of Otocic Sveti Nikola. A submarine pipeline extends 1.2 miles S from Rt Zavala. A submarine pipeline and a cable extend across the NW side of Uvala Zavala.



BUDVA AND ADJOINING COAST

**Luka Budva** (42°17'N., 18°50'E.) (World Port Index No. 41630), a small harbor, lies in a bay formed between the mainland and two rocky spits which extend N and NW from the N extremity of Otocic Sveti Nikola. The town of Budva, a resort, is situated on a small promontory at the SW side of the bay.

Lovcen, 1,749m high, stands 7 miles N of the town. The summit of this mountain has two peaks. One peak is surmounted by a radio tower and the other by a mausoleum. Spas, 389m high, stands close W of the town. This hill is shaped like a pyramid and from a distance appears as an island. A prominent belfry is situated in the town.

The harbor is enclosed by two moles and has depths of 1 to 5m alongside the quays. It is used by pleasure craft, small craft, and small passenger ferries. Vessels can anchor in depths of 7 to 8m, mud and weed, to the E of the harbor. Pilotage is compulsory. Pilots must be requested in advance and are provided from Bar.

**Caution.**—A submarine pipeline, which may best be seen on the chart, extends from a point close SW of the harbor at Budva to the NW part of the head of Uvala Jaz.

**Uvala Jaz** (42°17'N., 18°49'E.), a small inlet, indents the coast 1 mile W of Budva. Uvala Trsteno, another small inlet, indents the coast 1 miles W of Uvala Jaz. Both of these inlets are sheltered, but are open to the S. Anchorage is available in depths of 7 to 18m, sand, under the E shore of Uvala Jaz.

**9.12 Rt Platamon** (42°16'N., 18°47'E.), a rounded point, forms the SE end of a large and steep-to hilly projection which extends 5 miles NW to Rt Zukovac. A main light is shown from a prominent tower, 10m high, standing on the point.

A conspicuous chapel is situated near the shore, about midway between the point and Rt Zukovac and a prominent conical hill, 364m high, stands 1 mile SE of it. Anchorage can be taken in a depth of 40m about 0.2 mile SW of the chapel, but vessels in this vicinity should depart at once on the indication of S winds.

Greben Kamenik, a steep-to rock, lies about 0.4 mile NW of Rt Zukovac. It is nearly awash and is marked by a beacon.

**Zaliv Traste** (42°22'N., 18°41'E.), a fairly large bay, is entered between Rt Traste and Rt Kotciste, 1.5 miles WNW. A low isthmus is located at the head and connects the hilly peninsula that forms the W side of the bay with the high land to the SE of it. Mount Prcja Glava, 409m high, rises 2.3 miles ESE of Rt Traste and forms a conspicuous landmark from the W. Rt Taste is marked by a light and fronted by a spit, with a least depth of 3.3m, which extends up to 0.3 mile N.

Uvala Bigova, a small cove, lies in the SE corner of the bay and the village of Traste, with a conspicuous church, stands at its head. Anchorage, protected from S winds, can be taken in depths of 12 to 14m, sand, about 0.3 mile NE of Rt Traste.

**Caution.**—A submarine pipeline, which may best be seen on the chart, extends 2 miles SSW from the N shore of Zaliv Traste.

An explosives dumping area, which may best be seen on the chart, lies centered 14 miles SW of Rt Platamon.

It is reported that charted depths along this part of the coast are unreliable and the coastline may differ in places. (See General Remarks.)

## **Boka Kotorska (42°23'N., 18°32'E.)**

**9.13 Boka Kotorska**, a large gulf, consists of an entrance channel and three natural and inter-connecting basins which provide excellent shelter for vessels of all sizes. The bottom is mostly mud near the middle of the basins and sand, mud, and shells near the shores.

**Rt Ostra** (42°24'N., 18°32'E.), the W entrance point of Boka Fotordka, is 62m high and precipitous. This point is the SE extremity of a narrow and rocky peninsula that extends 1.5 miles SE from the mainland. It is marked by a light and is surmounted by a conspicuous fort and a signal station.

Rt Miriste, the E entrance point, is located 1.5 miles E of Rt Ostra and the tower of an old fort stands on its extremity. Otocic Mamula, a small islet, lies 1 miles NE of Rt Miriste. It is surmounted by a fort and marked by a light.

Generally, the basins are surrounded by high land with a number of peaks which stand out prominently in clear weather. Mount Radostak, 1,446m high, stands 6.3 miles N of Rt Ostra and Mount Dobrostrica, 1,570m high, stands 1 mile WNW of it.

Topaljski Zaliv, the W bay of Boka Kotorska, is 3.5 miles long and is surrounded by high land with numerous settlements along the shores. The harbors of Hercegnovi, Meljine, and Zelenika lie along the N shore of this bay and are of some commercial importance. The small harbor of Kotor lies in the S corner of the Kotorski Zaliv, the E bay.

**Winds—Weather.**—The bora, the dry NE and N wind, and the scirocco, the humid SE and S wind, occur here more frequently in winter. They may be dangerously sudden and blow with great violence down the slopes and through the gorges of the surrounding mountains. The bora may be accompanied by fog, snow, and sudden changes in temperature, but the scirocco, a warm wind, usually brings fog and rain.

**Tides—Currents.**—In the entrance to the gulf the currents set to the NW along the E shore and SE along the W shore, frequently attaining a velocity of 2.5 knots in either direction. In the narrows of Kumbur the current usually sets to the W and is very strong, but in Verige the current is variable in direction and never exceeds a velocity of 0.5 knot under normal conditions.

Off the entrance to Boka Kotorska, the coastal current is deflected by an outflow caused by SE winds, which sets the water towards shore and causes eddies.

**Pilotage.**—Pilotage is compulsory for Boka Kotorska and all the ports within it. Pilots can be contacted by VHF and board about 1 mile SSW of Rt Miriste. Vessels should send an ETA and a request for pilot in advance.

**Caution.**—In the N part of the entrance channel leading into Boka Kotorska, the NW and SE currents meet at the change of the tide and with a S wind can cause a heavy and dangerous sea in this vicinity.

The coastal border between Montenegro and Croatia lies in the vicinity of the mouth of Boka Kotorska.

**9.14 Hercegnovi** (42°27'N., 18°32'E.) (World Port Index No. 41570), a small harbor, is enclosed by a breakwater on the S side, and a small jetty on the W side. The town stands NE of the harbor and is conspicuous against the terraced hill sides of

the background. A prominent belfry, with a monastery 0.3 mile ENE of it, is situated in the E part of the town.

There are depths of 6 to 8m in the harbor entrance. The outer 120m of a quay, on the S side of the harbor, is reported to have depths of 4.9 to 8.8m alongside and is used by medium-sized vessels or coasters. The inner part of the harbor is used by lighters and small craft.

Greben Karatoc, a dark and jagged rock, lies close SE of the breakwater and must be avoided.

**Meljine** (42°27'N., 18°34'E.) (World Port Index No. 41580), a small harbor, lies at the head of a bay and is formed by two jetties protected by a short breakwater. The harbor has depths of 1 to 4m and is used by small craft.

A conspicuous naval hospital and a monastery are situated near the W entrance point of the bay and a conspicuous and large hotel stands on the NE shore. Greben Savina, an above-water rock, lies close offshore S of the hospital and a prominent church stands on a hill 0.5 mile ENE of the hotel.

**Zelenika** (42°27'N., 18°35'E.), a small harbor, lies on the E shore of Uvala Meljine and maintains the pilot station for Boka Kotorska. It is reported that the harbor was damaged by an earthquake and is closed to commercial shipping. Reconstruction is in progress.

**9.15 Tivatski Zaliv** (42°26'N., 18°40'E.), the middle bay of Boka Kotorska, is connected to Topaljski Zaliv by Kumborski Strait, a deep passage. This bay is steep and rocky on its S side, but the NE and NW shores, which are backed by mountains, are low and cultivated. Uvala Kukuljina and Uvala Krtole, separated from each other by a group of islands and a reef, lie in the SE part of this bay and are backed by the lowlands of the valley of Zupa. The NW shore of the bay is fairly well populated with several small towns, some of which are fronted by piers suitable for coasters. The Naval Base of Tivat is situated along the E shore of the bay.

Ostrvo Stradioti, the largest of the islands lying in the SE part of the bay, is 37m high and is marked by several beacons at its W extremity. It is easily recognized against the lowlands in the background. Otocic Otok, the W and smallest island in the group, can be identified by a church with a prominent belfry standing on its N shore.

Plicina Jezicac, nearly awash, lies at the outer end of a spit which extends about 0.5 mile WNW from the N extremity of Ostrvo Stradioti. Vessels should not attempt to pass between this reef and the islands to the E.

Vessels may take anchorage in depths of 13 to 15m, mud, within Uvala Kukuljina about 1 mile E of Plicina Jezicac.

**Caution.**—Anchorage prohibited areas, which may best be seen on the chart, lie in the vicinity of the naval base.

Tivatski Zaliv is the center of much naval activity. A torpedo range, 3.2 miles long, and target buoys are situated in the S part of the bay.

**9.16 Tivat** (42°26'N., 18°42'E.) (World Port Index No. 41620), a naval arsenal and base, lies along the NE shore of Tivatski Zaliv, 9 miles within the entrance to Boka Kotorska. It can be easily identified by numerous prominent buildings. The harbor lies along the quayed shorefront of the arsenal and consists of a rectangular basin which is entered between its SW

corner and a finger pier on the S side. A floating drydock is moored outside and close W of the harbor. The harbor has depths of 3 to 7.9m. Stanisic Quay, situated close SE of the harbor, can be used by commercial coastal vessels with drafts up to 4.5m. Vessels can take anchorage in depths of 29 to 39m about 0.5 mile NW of Rt Seljanova, a point, which lies 0.5 mile NW of Tivat and is marked by a light.

A small town, which contains a church with a conspicuous belfry, is situated 1 mile NNW of Tivat. This belfry is visible from all parts of Tivatski Zaliv.

Verige Strait, a narrow and deep passage, is steep-to and leads 1.3 miles NNE. It connects Tivatski Zaliv with a basin to the SE known as Kotorski Zaliv and with a basin to the NW known as Morinjski Zaliv. Caution is necessary when leaving the passage because the convergence of the currents from Kotorski Zaliv and Morinjski Zaliv sometimes causes a race.

Otocic Sveti Dord and Otocic Gospa od Skrpjela, two small islets, lie close together 0.5 mile N of the N entrance of Verige Strait. Each of these islets is surmounted by a chapel. Vessels may pass on either side of these islets, although the channel to the S is preferred. However, no attempt should be made to pass between them.

Morinjski Zaliv is divided into two small bays. Several small villages are situated on the shores of these bays and most are fronted by quays which are suitable for coasters or small craft.

**Risan** (42°31'N., 18°42'E.) (World Port Index No. 41590), a small harbor, lies at the NW head of Morinjski Zaliv and is protected by a breakwater. The town is situated close E of the harbor and can be easily recognized by a large hospital standing in its N part and a church, with a prominent belfry, standing near the center. The harbor has depths of 2.7 to 5.2m and is used by small vessels and coasters. Anchorage can be taken in depths of 13 to 16m, mud, about 0.5 mile SSW of the harbor entrance. Caution is advised as squalls can blow with strength into this bay.

**9.17 Kotor** (42°25'N., 18°46'E.) (World Port Index No. 41610), a small port, lies on the E side of the head of Kotorski Zaliv and 15 miles from the entrance of Boka Kotorska.

**Winds—Weather.**—The bora and the scirocco both blow with considerable force within Kotorski Zaliv, particularly along the N shore. However, the harbor at Kotor is sheltered.

**Depths—Limitations.**—The main quay, about 360m long, fronts the town and has depths of 5.1 to 8m alongside. Vessels up to 144m in length and 7.9m draft can be accommodated.

**Aspect.**—Drazin Rt is located about midway along the N shore of Kotorski Zaliv. Several conspicuous buildings stand in the vicinity of this point. Sveti Stasije is situated on the E shore of the bay, 2.7 miles NNW of Kotor. A light is shown here and a prominent church is situated near it. The E and SW shores of the bay are populated with small and prominent villages, some of which are fronted by piers suitable for small craft or coasters.

The ancient walls surrounding part of the town of Kotor are prominent from seaward. A conspicuous obelisk stands near the shore at the N side of the town.

**Regulations.**—In order to prevent damage to boats or floating objects secured alongside wharves and to small craft underway, all vessels are prohibited from proceeding at a speed of more than 12 knots anywhere within Kotorski Zaliv.



**Anchorage.**—Vessels can take anchorage in depths of 16 to 18m, mud, about 0.3 mile NW of the head of the quay. Large vessels can take anchorage within Kotorski Zaliv in a depth of 31m, mud, about 1 mile NW of Sveti Stasije.

**Caution.**—It has been reported that, with the exception of a heavily guarded section under naval control, the entire Bay of Kotor has been mined due to the existing (1999) state of war, and that all maritime activity has been declared prohibited.

## Boka Kotorska to Dubrovnik

**9.18 Rt Jubuka** (42°27'N., 18°25'E.), located 7 miles NW of Ostri Rt, is the NW extremity of a hammerhead shaped projection which extends 1 mile offshore and forms two small bights. Ostrvo Molunat is the largest of two small islets which lie close off the SE extremity of this projection. It is 49m high and is marked by a light. It is reported that a radiobeacon is situated on the SE part of the projection.

Luka Mali Molunat, the SE bight of the above projection, affords sheltered anchorage to small vessels with local knowledge which can proceed through the narrow opening between Ostrvo Molunat and the mainland to the NE. Luka Veliki Molunat, the NW bight, provides a temporary refuge from SE gales, but is open to the NW and heavy seas frequently set into it.

Sniježnica, 1,234m high, stands 4 miles inland, 6.5 mile NNW of Rt Jubuka. This mountain has a bare and conspicuous summit which can be seen from any position off this section of the coast.

**Rt Sustjepan** (42°35'N., 18°13'E.), 49m high, is the NW extremity of a narrow projection which extends 1 mile NW from the coast. Rt Rat is the NW extremity of a similar projection, 42m high, located 0.3 mile NE. Cavtatska Luka, an inlet, is entered between these points and the town of Cavtat is situated in the vicinity of its head. It is reported (1992) that a radiobeacon is situated in the vicinity of Rt Rat.

**Otoci Cavtatski Grebeni** (42°34'N., 18°12'E.), a group of islets and above-water rocks, lies up to 2 miles W of Rt Sustjepan. Otocic Mrkan, the largest islet, is 65m high and appears dark from seaward.

**Zupski Zaliv** (42°36'N., 18°12'E.) is entered between Rt Sustjepan and Rt Pelegrin, 2.5 miles NW. The E and SE shores of this bay are backed by mountains, but a valley through which a river flows lies within the N shore. Malastica, 628m high, stands 1 mile N of the bay. This hill has a somewhat sharp peak and is prominent from seaward. A conspicuous church stands on the NW side of the bay. Anchorage can be taken in depths of 28 to 37m, mud, about 0.5 mile off the E shore of the bay. The anchorage is sheltered from S and SE winds, but NW and SW winds sometimes send in a heavy sea and caution is advised.

Otok Supetar lies 0.7 mile NNW of Rt Sustjepan. This islet is 8m high and a prominent building stands near its summit. Hrid Superka, an above-water rock, lies on a rocky patch about 0.3 mile SE of this islet.

Cavtatska Luka is generally steep-to except at its head. This inlet provides shelter for coasters and a mooring buoy is situated in the center. The town of Cavat is fronted by 270m of quayage which may be used by small craft and small coasters.

**Otok Lokrum** (42°38'N., 18°07'E.), 89m high, lies in the approaches to Dubrovnik, 3 miles WNW of Rt Pelegrin, the W entrance point of Zupski Zaliv. This rocky and steep-to island has two summits and is covered by evergreen trees and bushes. From the SW, it appears as two islets. The ruins of a fort are situated on the N summit and a monastery stands on the S flat part of the island.

**Rt Petka** (42°39'N., 18°03'E.), the W extremity of Lapad Peninsula, is bold, steep-to, and covered with brushwood. Mount Petka, 192m high, rises above the point. This hill has two peaks and reddish brown cliffs on its seaward side.

**Hridi Grebeni** (42°35'N., 18°13'E.) consists of a chain of barren, jagged, and reddish above-water rocks that lie on a reef between 0.2 and 0.6 mile W of Rt Petka. A passage leads between these rocks and the point, but it is only used by small vessels with local knowledge. A main light is shown from a prominent structure, 13m high, standing on the W rock of this chain.

**9.19 Uvala Sumartin** (42°39'N., 18°03'E.), a small bay, is open to the W. It indents the W end of the Lapad Peninsula and lies between Rt Petka and Rt Gnjliliste, 0.6 mile N. Small vessels can find temporary shelter here, but anchorage is dangerous in winter.

**Otocic Daksa** (42°40'N., 18°04'E.), a densely wooded island, lies with its S extremity located 0.3 mile N of Rt Gnjliliste. Its summit is surmounted by a ruined fort. A light is shown from a structure, 4m high, standing near the shore on the N extremity of the island. A prominent disused light structure stands above the light.

**Luka Zaton** (42°41'N., 18°03'E.), a small and narrow inlet, is entered 0.9 mile NNW of Otocic Daksa and extends 1 mile NNW. The coast in the approaches is rocky and steep-to, but the shores of this inlet are bordered by ledges and shoals. A narrow channel, with depths of 18 to 23m, leads into the inlet between these shoals. Anchorage can be taken in the middle of the inlet in depths of 19 to 22m, mud, but caution is recommended as the area is exposed to S winds. The village of Veliki Zaton is situated on the W shore of the inlet and is fronted by a small boat harbor.

**Rt Bat** (42°41'N., 18°03'E.), the W entrance point of Luka Zaton, is located 1 mile NNW of Otocic Daksa. A light is shown from a tower, 6m high, standing on this point.

**Caution.**—A submarine pipeline extends 0.8 mile S from a point on the coast 0.4 mile E of Rt Petka.

A submarine cable, which may best be seen on the chart, extends inshore along the coast between Ostri Rt and Hridi Grebeni.

Several submarine cables and a pipeline extend between the N side of Otok Lokrum and the mainland.

## Dubrovnik (42°38'N., 18°07'E.)

World Port Index No. 41550

**9.20 Dubrovnik**, a large city, stands the mainland shore to the N of Otok Lokrum and extends to the N. Stara Luka, the old harbor, lies on the SE side of the walled and prominent part of the city. It is protected by breakwaters and used by small craft. The main commercial port facilities are situated within

Luka Gruz and Rijeka Dubrovacka, which front the NW side of the city.

**Winds—Weather.**—Strong NW and S winds send heavy seas into Velika Vrata, but they are usually of short duration. Luka Gruz is sheltered from all winds except the bora which blows with exceptional violence in this vicinity.

**Depths—Limitations.**—**Luka Gruz** (42°40'N., 18°05'E.) (World Port Index No. 41540), the main commercial harbor for Dubrovnik, extends 0.9 mile SE from Rt Kantafig. Gruz, a suburb of Dubrovnik, is situated on the E side of this inlet and has many tall buildings. Lapad is situated on the W side of the harbor and consists mainly of villas and hotels.

There are depths of 35m in the harbor approach. There is 1,934m of quayage within the harbor, which provides nine berths for ocean-going vessels. In addition, there is 534m of quayage which provides five berths for small vessels and coasters. These berths have depths of 6.5 to 13m alongside. There are facilities for general cargo, bulk, ro-ro, and container vessels. Containerized cargo is handled at Pier 16 which is 185m long and has an alongside depth of 10.2m. The ro-ro berth is 100m long and can accommodate vessels of up to 12m draft. Vessels up to 60,000 dwt, 230m in length, and 9.75m draft have been accommodated.

Rijeka Dubrovacka, a narrow inlet, extends 2 miles E from Rt Kantafig and serves as an additional mooring area for Dubrovnik. There is a tanker berth which can handle vessels up to 10,000 dwt, 110m in length, and 7m draft.

Extensive yacht marinas lie near the heads of both Luka Gruz and Rijeka Dubrovacka.

**Aspect.**—Rt Kantafig, located 0.9 mile E of Otocic Daksa, is the SW entrance point of Rijeka Dubrovacka and the NW entrance point of Luka Gruz. A light is shown from a structure, 5m high, standing on this point.

**Pilotage.**—Pilotage is compulsory for vessels over 500 grt and all vessels carrying dangerous chemical or combustible substances. Pilots can be contacted by VHF and board about 0.7 mile NW of Hridi Grebeni. Vessels must send an ETA 24 hours in advance to Radio Dubrovnik (YUX).

**Anchorage.**—Anchorage can be taken in depths of 35 to 42m, mud, about 0.2 mile W of Otocic Daska. The anchorage is not recommended in S winds.

**Directions.**—Vessels entering Luka Gruz or Rijeka Dubrovacka should pass through Velika Vrata, which leads W of Hridi Grebeni. Vessels may then pass on either side of Otocic Daksa. The NW side of Mala Vrata, the S channel, should be favored as a shoal bank borders the mainland shore.

It is reported that all vessels are prohibited from using Mala Vrata between 1 April and 1 October annually.

**Caution.**—Submarine cables, which may best be seen on the chart, lie in the approaches to the port.

Due to the existence of submarine pipelines and cables, anchoring prohibited areas, which may best be seen on the chart, lie in the vicinity of the entrance to and within Rijeka Dubrovacka and Luka Gruz.

Several wrecks, which may best be seen on the chart, lie within Luka Gruz and are marked by buoys.